

DEPARTMENT OF FOOD AND AGRICULTURE
PROPOSED CHANGES IN THE REGULATIONS

Title 3, California Code of Regulations

Section 3423(b), Oriental Fruit Fly Interior Quarantine

INITIAL STATEMENT OF REASONS/

POLICY STATEMENT OVERVIEW

Description of the Public Problem, Administrative Requirement, or Other Condition or Circumstance the Regulation is Intended to Address

These regulations are intended to address the obligation of the Secretary of Food and Agriculture to protect the agricultural industry of California from the movement and spread within California of injurious plant pests.

Specific Purpose and Factual Basis

The specific purpose of Section 3423 is to provide for the State to regulate the movement and possible carriers of Oriental fruit fly from the area under quarantine to prevent the artificial spread of the fly to noninfested areas to protect California's agricultural industry.

The factual basis for the determination by the Department that amendment of Section 3423 is necessary is as follows:

Oriental fruit fly is a destructive insect pest of innumerable commercial agricultural crops. Fruits (including nuts, dates, and berries), many kinds of vegetables, and the fruiting bodies of many wild and ornamental plants are known to be hosts or possible hosts of the Oriental fruit fly. Larval feeding reduces the interior of fruit to a rotten mass. Egg punctures admit decay organisms that cause tissue breakdown. Damaged fruit is generally unfit for human consumption. Movement of hosts infested with the larvae of the fly can artificially spread the fly.

Adult Oriental fruit flies have recently been trapped in the County of San Bernardino. On September 23, 2003, a male Oriental fruit fly was taken from a trap in the Upland area of San Bernardino County. On September 25,

2003, a male Oriental fruit fly was taken from a trap in the Ontario area of San Bernardino County. On October 3 and October 9, 2003, male Oriental fruit flies were taken from traps in the Ontario area of San Bernardino County. On October 16, 2003, male Oriental fruit flies were taken from traps in the Chino and Ontario areas of San Bernardino County. On October 17, 2003, one female and three male Oriental fruit flies were taken from traps in the Ontario area of San Bernardino County. On October 18, 2003 one female and one male Oriental fruit fly were taken from traps in the Ontario area of San Bernardino County. On October 23, 2003, another male Oriental fruit fly was taken from a trap in the Chino area. The detection of numerous adult Oriental fruit flies is indicative of an incipient infestation of Oriental fruit fly in the Ontario area of San Bernardino County.

Oriental fruit fly has been established in Hawaii, since 1946, where it is a major pest of agriculture, particularly on mangoes, avocados and papayas. Maggots have been found in over 125 kinds of fruits and vegetables in Hawaii alone. A great number of crops in California are threatened by the introduction of this pest, including apples, apricots, avocados, cherries, citrus, figs, nectarines, peaches, pears, plums and tomatoes. It has been estimated that the cost of not eradicating Oriental fruit fly in California would range from \$44 to \$176 million in crop losses, additional pesticide use, and quarantine requirements. Oriental fruit fly has been introduced into California a number of times, through the movement of prohibited host fruits and vegetables into the State, and has been eradicated.

Females lay eggs in groups of 3 to 30 under the skin of host fruits and vegetables; the female can lay more than 1,000 eggs in her lifetime. Time taken for development depends upon the ambient air temperature. Maggots (larvae) tunnel through the fruit feeding on the pulp, shed their skins twice, and emerge through exit holes in approximately 10 days. The larvae drop from the fruit and burrow 2 to 3 cm. into the soil to pupate. In 10 to 12 days adults emerge from these puparia. The newly emerged adult females need 8 to 12 days to mature sexually prior to mating and egg-laying. Breeding is continuous, with several annual generations. Adults live 90 days on the average and feed on honeydew, decaying fruit, plant nectar, bird dung, and other substances. The adult is a strong flyer recorded to travel up to 30 miles in search of food and sites to lay eggs. This ability allows the fly to infest new areas very quickly. Transport of fruit infested with eggs or larvae also allows the fly to spread artificially and infest new areas very quickly.

If the fly were allowed to spread and become established in host fruit production areas, California's agricultural industry would suffer losses due to decreased production of marketable fruit, increased pesticide use, and loss of markets if the United States Department of Agriculture (USDA) or other states or countries enact quarantines against California products which can host and carry the fly larvae and pupae.

The amendment of Section 3423 established approximately 137 square miles surrounding the infestations and fly finds in the Ontario area of San Bernardino County and includes a small portion of Los Angeles County (Pomona area) as the area under quarantine for Oriental fruit fly. To prevent artificial spread of the fly to noninfested areas to protect California's agricultural industry, it is necessary to regulate movement of hosts that can carry the fly from, into and within the infested area and a surrounding buffer area. Therefore it was necessary to amend this regulation to establish a new quarantine area in the Ontario area of San Bernardino County and the Pomona area of Los Angeles County.

The quarantine area includes the initial detection sites as the epicenters and a buffer zone extending approximately 4- 1/2 miles in each direction from the epicenters. A buffer zone is necessary because the fly can spread naturally (as well as artificially in infested hosts). The boundary line was drawn jointly by the United States Department of Agriculture, the California Department of Agriculture, and the agricultural commissioners of Los Angeles and San Bernardino counties, and the quarantine area is considered the minimum area around the initial detection sites which should be regulated to prevent artificial spread of Oriental fruit fly to noninfested areas.

Estimated Cost or Savings to Public Agencies or Affected Private Individuals or Entities

The Department of Food and Agriculture has determined that Section 3423 does not impose a mandate on local agencies or school districts, except that agricultural commissioners of counties under quarantine have a duty to enforce it. No reimbursement is required under Section 17561 of the Government Code because the agricultural commissioners of Los Angeles and San Bernardino counties requested the change in the regulations.

The Department also has determined that no savings or increased costs to any state agency, no reimbursable costs

or savings under Part 7 (commencing with Section 17500) of Division 4 of the Government Code to local agencies or school districts, no nondiscretionary costs or savings to local agencies or school districts, and no costs or savings in federal funding to the State will result from the proposed action.

The cost impact of the changes in the regulations on private persons or businesses is not expected to be significant.

The Department has determined that the proposed action will not have a significant adverse economic impact on housing costs or California businesses, including the ability of California businesses to compete with businesses in other states. The Department's determination that this action will not have a significant adverse economic impact on businesses was based on the following:

Within the quarantine area, the Department has identified 116 markets/produce vendors. These businesses must maintain quarantine commodities in a manner that precludes exposure to Oriental fruit fly. Approved safeguards include maintaining the commodities indoors, in coolers, in plastic bags, enclosed behind window screen, or covered with fine mesh or plastic. All of these methods are very inexpensive. These businesses may experience a reduction in sales and reduced shelf-life of the commodities. Neither of these reductions would represent a significant economic impact.

There are 60 nurseries in the area under quarantine that must treat the soil of host plants and strip the fruit of host plants before they may be moved from or within the area under quarantine. The required treatment is a soil drench with diazinon. This treatment does not have to be repeated if the fruit is kept stripped from the plants. The cost of the treatment is low and existing nursery personnel perform the treatment and fruit stripping. The fruit is placed in plastic bags for landfill disposal. The plastic bags are inexpensive and the extra material for landfill disposal does not add appreciably to their existing disposal costs.

The Department has identified 15 growers in the area under quarantine. Host fruit from growers outside the core area (a one mile area surrounding the infested sites) must be treated with Malathion bait spray before it can be moved. Spray costs are approximately \$3 per acre with a maximum of five required applications. Spray

applications may be made by a commercial applicator or by the growers. Growers routinely spray for other plant pests so the additional applications would not be a significant expense. There are no known growers located within the core area who would only have the quarantine treatment options of cold treatment, fumigation or processing for host material. Host material produced in the core area is considered to be a higher risk due to its proximity to the known infested sites. Fumigation costs are approximately \$0.015 per pound of product.

Within the quarantine area, the Department has identified 38 yard maintenance businesses that must safeguard all host fruit being removed from properties within the quarantine area by placing it in plastic bags for disposal at a landfill. The plastic bags are inexpensive and there is no extra material for disposal at a landfill, as it would have been removed anyway.

The Department has also identified two fruit haulers and four packer/processors that are affected. These businesses must also safeguard all host fruit until it is delivered, packed or processed in an approved manner. Most of these businesses are already in compliance with the safeguarding procedures but may have some related extra costs.

No business has gone out of business due to the quarantine. Many businesses have benefited from the sales of safeguarding materials and others have benefited from Oriental fruit fly expenditures by State and Federal governments.

Based on the above information, it was determined that the amendment of Section 3423(b) will not have a significant adverse economic impact on businesses. All costs associated with compliance with the regulation are low and, for the most part, a number of optional ways to comply are available to businesses so they may select the means with the lowest cost and easiest implementation for them. For many businesses, no additional costs were incurred.

Assessment

The Department has made an assessment that repealing these regulations would not (1) create or eliminate jobs

within California, (2) create new business or eliminate existing businesses within California, or (3) affect the expansion of businesses currently doing business within California.

Alternatives Considered

The Department of Food and Agriculture must determine that no alternative considered would be more effective in carrying out the purpose for which the action is proposed or would be as effective and less burdensome to affected private persons than the proposed action.

Information Relied Upon

The Department is relying upon the following studies, reports, and documents in the amendment of Section 3423(b):

“Estimated Economic Impact – Ontario Area, San Bernardino County, Oriental Fruit Fly Interior Quarantine,” California Department of Food and Agriculture, Plant Health and Pest Prevention Services, Permits and Regulations, December 1, 2003.

“Establishments Affected by the Oriental Fruit Fly Interior Quarantine, Ontario Area San Bernardino County,” California Department of Food and Agriculture, Plant Health and Pest Prevention Services, Permits and Regulations, December 1, 2003.

“Annual Estimated Fruit Fly Quarantine Cost Basis,” California Department of Food and Agriculture, Plant Health and Pest Prevention Services, Permits and Regulations, December 1, 2003.

E-mail of November 19, 2003 to Stephen Brown from Muhammad I. Azhar.

E-mail of November 19, 2003 to Stephen Brown from Asif Maan.

Letter of October 23, 2003 to Stephen Brown from Edouard P. Layaye.

Letter of October 23, 2003 to Dennis Mayhew from Cato R. Fiksdal.

Pest and Damage Records #12715673 (October 23, 2003); #1408367 (October 18, 2003); #1408366 (October 18, 2003); #1272078 (October 17, 2003); #1408364 (October 17, 2003); #1408365 (October 17, 2003); #1408363 (October 16, 2003); #1271562 (October 16, 2003); #1272077 (October 9, 2003); #1272076 (October 3, 2003); #1271584 (September 25, 2003); and #1271606 (September 23, 2003); California Department of Food and Agriculture.